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Reply to Office action of Oct. 17, 2003

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1-5 (cancelled)

Claim 6 (previously presented) A method for forming a nitride read only memory, the method comprising:

providing a P-type semiconductor substrate;

forming a stacked oxide-nitride-oxide layer on said P-type semiconductor substrate;

forming and defining a plurality of photoresister layers on said stacked oxide-nitride-oxide layer to expose a portion of said stacked oxide-nitride-oxide layer;

performing an etching process by way of using said plurality of photoresister layers as a plurality of etching masks to etch said stacked oxide-nitride-oxide layer and form a plurality of read only memory cells;

performing a pocketed ion-implantation with an indium ion at least one time by way of using said plurality of photoresister layers as a plurality of ion-implanting masks to form a plurality of pocket dopant regions having said indium ion in said P-type semiconductor substrate;

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performing afterward an N-type ion-implanting process by way of using said plurality of photoresister layers as said ion-implanting masks to form a plurality of N-type ion-implanting regions in said P-type semiconductor substrate between said plurality of photoresist layers; and

removing said plurality of photoresist layers to form said read only memory.

removing said plurality of photoresist layers to form said read only memory.

Claim 7 (cancelled)

Claim 8 (previously presented): The method according to claim 6, wherein the method for forming said stacked oxide-nitride-oxide layer comprises a depositing process.

Claim 9 (original): The method according to claim 6, wherein said plurality of pocket dopant regions having said indium ion are located in said P-type semiconductor substrate beside said plurality of N-type ion-implanting regions.

Claim 10 (original): The method according to claim 6, wherein said plurality of N-type ion-implanting regions comprises a plurality of source/drain regions.

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Claim 11-15 (canceled)

Claim 16 (previously presented): A method for forming a nitride read only memory, the method comprising:

providing a P-type semiconductor substrate;

forming an oxide-nitride-oxide layer on said P-type semiconductor substrate;

forming and defining a plurality of photoresister layers on said oxide-nitride-oxide layer to expose a portion of said oxide-nitride-oxide layer;

performing an etching process by way of using said plurality of photoresister layers as a plurality of etching masks to etch said oxide-nitride-oxide layer and form a plurality of read only memory cells;

performing an N-type ion-implanting process by way of using said plurality of photoresister layers as an ion-implanting masks to form a plurality of N-type ion-implanting regions in said P-type semiconductor substrate between said plurality of read only memory cells;

performing a pocketed ion-implantation with an indium ion at least two time by way of using said plurality of photoresister layers as said plurality of ion-implanting masks to form a plurality of pocket dopant regions having said indium ion beside said P-type semiconductor substrate under said plurality of memory cells; and

removing said plurality of photoresist layers to form said nitride read

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only memory.

Claim 17 (original): The method according to claim 16, wherein the method for forming said oxide-nitride-oxide layer comprises a depositing process.

Claim 18 (original): The method according to claim 16, wherein said plurality of N-type ion-implanting regions are separated by a channel from each other.

Claim 19 (original): The method according to claim 16, wherein said plurality of N-type ion-implanting regions comprises a plurality of source/drain regions.

Claim 20 (original): The method according to claim 16, wherein said plurality of pocket dopant regions having said indium ion are located in said P-type semiconductor substrate beside said plurality of N-type ion-implanting regions.